AMENDMENTS TO THE CLAIMS

Please enter the follow amendments to the claims:

1-31 (Canceled)

32. (Previously presented) An apparatus for controlling water level in a pool, the apparatus comprising:

a water level sensor adapted to be immersed in the pool water;

a processor positioned within a housing and electrically connected with the sensor to detect low water in the pool;

a wireless transmitter electrically connected with the processor for sending a low water signal if the processor detects the low water;

a power source for powering the processor;

a tilt switch connected between the power source and the processor for supplying power to the processor while in an on position, the tilt switch enclosed within the housing and movable between the on and off position by tilting the housing; and

a remote wireless receiver for receiving the signal from the transmitter and turning on a valve to add water to the pool.

33. (Previously presented) The apparatus according to claim 32, wherein the tilt switch is in an off position when the housing is inverted from an operational position.

34. (Previously presented) The apparatus according to claim 32, wherein the processor has a wave filter timer that turns on for a selected interval when the processor detects low water, and wherein the processor is adapted to delay the transmitter from sending the low water signal until the end of the selected interval and adapted to cause the transmitter to send the low water signal at the end of the selected interval only if the processor detects low water during substantially the entire selected interval.

35. (Previously presented) The apparatus according to claim 32, wherein a power input of the transmitter is connected to an output of the processor so that the transmitter is supplied with power momentarily during each duty cycle of the processor when the processor directs the transmitter to send the low water signal.

36. (Previously presented) The apparatus according to claim 32, wherein the power source is a battery, the apparatus further comprising a low battery voltage detector in the housing, the low battery voltage detector being connected to the processor for informing the processor if low battery voltage is detected, the processor adapted to delay the transmitter from sending the low battery voltage indication until the processor detects low water and adapted to encode the low battery voltage indication into the low water signal when sent by the transmitter.

37. (Previously presented) The apparatus according to claim 32, wherein the receiver has an overfill counter that turns on for a selected interval when the receiver receives one of the low water signals from the transmitter, the overfill counter causing the valve to remain on until the overfill counter reaches a selected count, and wherein the receiver is adapted to reset the overfill counter prior to reaching the selected count each time that the receiver receives a subsequent low water signal from the transmitter.

38. (Previously presented) An apparatus for controlling water level in a pool, the apparatus comprising:

a water level sensor adapted to be immersed in the pool;

a processor electrically connected with the sensor to detect a preprogrammed low water in the pool;

a wireless transmitter electrically connected with the processor for sending a digitally encoded low water signal;

a housing containing the processor and the transmitter;

a power source for powering the processor and the transmitter;

a remote receiver for receiving the signal from the transmitter and turning on a valve to add water to the pool;

a wave filter timer within the processor that turns on for a selected interval when the processor detects low water; and

the processor further has means for delaying the transmitter from sending the low water signal until the end of the selected interval and for causing the transmitter to send the low water signal at the end of the selected interval only if the processor continuously detects low water during the entire selected interval; and

wherein the low water signal sent by the transmitter is a momentary signal.

39. (Previously presented) The apparatus according to claim 38, wherein a power input of the transmitter is connected to an output of the processor so that the transmitter is supplied with power only when the processor directs the transmitter to send the low water signal.

40. (Previously presented) The apparatus according to claim 38, wherein the power source is a battery, the apparatus further comprising a low battery voltage detector in the housing, the low battery voltage detector being connected to the processor for informing the processor if low battery voltage is detected, the processor adapted to delay the transmitter from sending the low battery voltage indication until the processor detects low water and adapted to encode the low battery voltage indication into the digitally encoded low water signal being sent by the transmitter.

41. (Previously presented) The apparatus according to claim 38, wherein the receiver has an overfill counter that turns on for a selected interval when the receiver receives one of the low water signals from the transmitter, the overfill counter adapted to cause the valve to remain on until the overfill counter reaches a selected count, and wherein the receiver has means for resetting the overfill counter prior to reaching the selected count each time that the receiver receives subsequent low water signals from the transmitter.

42. (Previously presented) An apparatus for controlling water level in a pool, the apparatus comprising:

a water level sensor adapted to be immersed in the pool;

a processor electrically connected with the sensor that detects low water in the pool;

a transmitter electrically connected with the processor for sending a momentary low water signal;

a housing containing the processor, the transmitter, and a power source for powering the processor and the transmitter;

a remote receiver for receiving the signal from the transmitter and turning on a valve to add water to the pool; and

an overfill counter in the receiver that turns on for a selected interval when the receiver receives one of the low water signals from the transmitter, the overfill counter adapted to cause the valve to remain on until the overfill counter reaches a selected count to add water to the pool for a preselected time period associated with the selected count after the low water signal has terminated, and adapted to reset the overfill counter prior to reaching the selected count each time that the receiver receives subsequent low water signals from the transmitter.

43. (Previously presented) The apparatus according to claim 42, wherein a power input of the transmitter is connected to an output of the processor so that the transmitter is supplied with power only when the processor directs the transmitter to send the low water signal.

44. (Previously presented) The apparatus according to claim 42, wherein the power source is a battery, the apparatus further comprising a low battery voltage detector in the housing, the low battery voltage detector being connected to the processor for informing the processor if low battery voltage is detected, the processor having means for encoding a low battery voltage indication into the signal being sent by transmitter that indicates low water.

45. (Previously presented) A method for controlling water level in a pool,

(a) securing a water level sensor on the exterior of a housing;

(b) mounting a processor, a transmitter, and a power source to the housing;

(c) placing the housing in a portion of the pool at least partially submerged;

(d) mounting a receiver remote from the housing, the receiver being electrically connected to a valve of a water supply source that leads to the pool;

(e) sensing water level of the pool with the sensor and communicating the information sensed to the processor, and if the processor detects low water in the pool for a preselected time period, causing the transmitter to send a momentary signal indicating low water level; and

(f) receiving the low water signal by the receiver, opening the valve to cause water from the water supply source to flow into the pool.

46. (Previously presented) The method according to claim 45, wherein step (b) further comprises mounting a main power switch within the housing, the main power switch being a tilt switch that is sealed within the housing and inaccessible from an exterior of the housing.

47. (Previously presented) The method according to claim 46, wherein step (c) further comprises placing the housing in an upright position, causing the switch to close and send power to the processor.

48. (Previously presented) The method according to claim 45, wherein step (e) further comprises causing the transmitter to send a momentary digitally encoded signal indicating low water level, when the processor detects low water in the pool.

49. (Currently amended) The method according to claim 45, wherein step (e) further comprises delaying for a predetermined interval before supplying power from the processor to the transmitter causing the transmitter to send a momentary low water digitally encoded signal, when the processor detects low water in the pool.

50. (Previously presented) The method according to claim 49, wherein the transmitter is supplied with power only when the processor directs the transmitter to send the low water signal.

51. (Previously presented) The method according to claim 46, further comprising the steps of:

when it is desired to turn off the processor, tilting the housing to cause the switch to open; and

inverting the housing and leaving the housing in an inverted position to keep the power off.

52. (Previously presented) The method according to claim 45, further comprising supplying power to the transmitter from an output of the processor only during each duty cycle of the processor and only when the processor directs the transmitter to send the low water signal.

53. (Previously presented) The method according to claim 45, wherein the power source is a battery, the method further comprising:

detecting voltage of the battery and informing the processor if low battery voltage is detected;

delaying sending the low battery voltage indication until the processor detects low water; and

encoding a low battery voltage indication into the low water signal being sent by the transmitter.

54. (Previously presented) The method according to claim 45, further comprising:

upon receipt of a low water signal from the transmitter by the receiver, turning on an overfill counter and causing the valve to remain on until the overfill counter reaches a selected count, and

resetting the overfill counter prior to reaching the selected count each time that the receiver receives subsequent low water signals from the transmitter.

55. (Previously presented) A method for controlling water level in a pool,

securing a water level sensor on the exterior of a housing;

mounting a processor, a transmitter, and a power source to the housing;

placing the housing in a portion of the pool;

mounting a receiver remote from the housing, the receiver being electrically connected to a valve of a water supply source that leads to the pool;

sensing water level of the pool with the sensor and communicating the information sensed to the processor, and if the processor detects low water in the pool for a preselected time period, causing the transmitter to send a momentary digitally encoded low water signal; and

receiving the low water signal by the receiver, opening the valve to cause water from the water supply source to flow into the pool.

56. (Previously presented) The method according to claim 55, further comprising:

detecting voltage of the power source and informing the processor if low voltage is detected; and

encoding a low voltage indication into the low water signal being sent by transmitter.